

DATE: Sunday, July 20, 2003

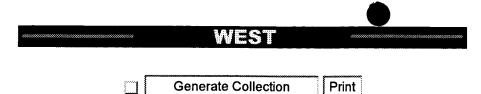
Set Name side by side	Query	Hit Count	Set Name result set
DB=US OP=ADJ	SPT,PGPB,JPAB,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES;		
L24	L23 and ((426/\$)!.CCLS.)	50	L24
L23	liquid.clm. and extrud\$5.clm. and gel\$5.clm.	312	L23
L22	liquid.clm. and exturd\$5.clm. and gel\$5.clm.	0	L22
L21	L19 and (animal feed or animal food or pet food or dog food or cat food)	2	L21
L20	L19 and (animal feed or animal food or pet food or dog food or cat food or food\$5)	185	L20
L19	L18 and gel\$5	730	L19
L18	extrud\$ near2 liquid	3489	L18
L17	115 and cool\$5	98	L17
L16	L15 and cool\$	98	L16
L15	gel\$5 near extruder	124	L15
L14	(meat emulsion or surimi) same gel\$5 near3 extruder	2	L14
L13	jacketed extruder	. 19	L13
L12	jacket\$5 near3 extrud\$4	2095	L12
L11	cool\$4 near2 exturder	1	L11
L10	animal near2 (food or feed) near2 gel\$5	56	L10
L9	liquid near3(gel\$ or solid\$5)near3 extrud\$5	344	L9
L8	liquid near3(gel\$ or solid\$5)near3 extrud\$5	344	L8
L7	liquid near3(gel\$ or solid\$5)near3 extrud\$5	344	L7
L6	L5 and gel\$5 near3 (animal food or animal feed or dog food or fish food or pet food)	14	L6
L5	L4 and (pet food or animal feed or animal food or fish or dog or cat or horse or mammal or bear or penguin or walrus or seals or otter or birds)	1055	L5
L4	((426/\$)!.CCLS.) and extrud\$6 and gel\$6	2088	L4
L3	liquid same extrud\$6 near3 gel\$6 same cool\$5	55	L3
L2	L1 and (pet food or animal food or animal feed or fish food or aquatic food)	2	L2
L1	liquid near5 gel\$6 near5 extrud\$6	205	L1



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Set Name side by side		Hit Count	
•	SPT,PGPB,JPAB,EPAB,DWPI; THES=ASSIGNEE; PLUR=YES;		result set
OP=ADJ	SI 1,1 OI D, SI AD, EI AD, DWI I, IIIES - ASSIGNEE; PLUK=IES;		
L17	115 and cool\$5	98	L17
L16	L15 and cool\$	98	L16
L15	gel\$5 near extruder	124	L15
L14	(meat emulsion or surimi) same gel\$5 near3 extruder	2	L14
L13	jacketed extruder	19	L13
L12	jacket\$5 near3 extrud\$4	. 2095	L12
L11	cool\$4 near2 exturder	1	L11
L10	animal near2 (food or feed) near2 gel\$5	56	L10
L9	liquid near3(gel\$ or solid\$5)near3 extrud\$5	344	L9
L8	liquid near3(gel\$ or solid\$5)near3 extrud\$5	344	L8
L7	liquid near3(gel\$ or solid\$5)near3 extrud\$5	344	L7
L6	L5 and gel\$5 near3 (animal food or animal feed or dog food or fish food or pet food)	14	L6
L5	L4 and (pet food or animal feed or animal food or fish or dog or cat or horse or mammal or bear or penguin or walrus or seals or otter or birds)	1055	L5
L4	((426/\$)!.CCLS.) and extrud\$6 and gel\$6	2088	L4
L3	liquid same extrud\$6 near3 gel\$6 same cool\$5	55	L3
L2	L1 and (pet food or animal food or animal feed or fish food or aquatic food)	2	L2
L1	liquid near5 gel\$6 near5 extrud\$6	205	L1

END OF SEARCH HISTORY



L50: Entry 6 of 32 File: USPT Oct 16, 2001

DOCUMENT-IDENTIFIER: US 6303175 B1

TITLE: Gelled foodstuff for aquatic animals

Current US Original Classification 426/573 (1):

<u>Current US Cross Reference Classification</u> (1):

<u>426/576</u>

Current US Cross Reference Classification (2):

<u>426/641</u>

Current US Cross Reference Classification (3):

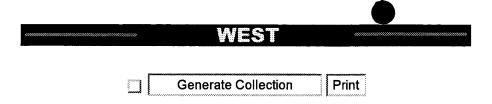
426/654

Current US Cross Reference Classification (4):

426/805

CLAIMS:

12. A process for the production of a feed according to claim 1, characterized in that one or more natural types of feed and/or commercially available feed mixtures, raw materials are mixed with one or more gel formers, and water in an extruder at temperatures elevated enough to produce a reaction between the gel former and water and subsequently, with cooling, the mixture is formed by means of an extruder to give cylinder-shaped sticks, granulates, cubes, plates, flakes or tablets of water content of from 20-99% by weight and these filled into glasses, tins, blister packs or, directly after the extruder, packed and subsequently cooled.



L51: Entry 1 of 5

File: PGPB

Apr 4, 2002

DOCUMENT-IDENTIFIER: US 20020039616 A1 TITLE: Cooled pipe animal feed gel extrusion

<u>Current US Classification, US Primary Class/Subclass</u> (1): 426/576

<u>Current US Classification, US Secondary Class/Subclass</u> (1): 426/635

#### CLAIMS:

7. An apparatus for extruding a firm, flexible animal feed gel, the apparatus comprising: A. A pipe having an inlet end and an outlet end, the inlet adapted for receiving a liquid animal feed at a temperature in excess of ambient temperature and the outlet end adapted for extruding a firm, flexible animal feed gel; B. A pump for passing the liquid animal feed through the pipe; C. A means for cooling the liquid animal feed to a temperature below the temperature of the liquid animal feed of step (A) such that the feed solidifies to a stiff, flexible gel while in the pipe; and D. A means for collecting gel as it exits the pipe.



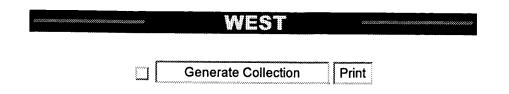
L50: Entry 2 of 32 File: PGPB Apr 4, 2002

DOCUMENT-IDENTIFIER: US 20020039616 A1

TITLE: Cooled pipe animal feed gel extrusion

 $\frac{\text{Current US Classification, US Primary Class/Subclass}}{426/576} \ (1):$ 

 $\frac{\text{Current US Classification, US Secondary Class/Subclass}}{426/635} \hspace{0.1cm} \textbf{(1):}$ 



L50: Entry 3 of 32

File: USPT

Jul 15, 2003

DOCUMENT-IDENTIFIER: US 6592913 B2 TITLE: Crosslinked branched polyesters

Detailed Description Text (27): In yet another embodiment, the process comprises processing the crosslinked branched polyester gel in a cooling apparatus or an additional extruder to lower the temperature of the crosslinked gel. The temperature is preferably lowered to from about 25 to about 150.degree. C., more preferably from about 25 to about 100.degree. C., and most preferably from about 25 to about 60.degree. C. The crosslinked polyester gel from this embodiment may be directed to a container.

# Detailed Description Text (53):

After exiting the optional degasser 60, the pre-gel materials "A" and "B" are mechanically or statically mixed to provide a mixture, which is schematically indicated by merging at a mixing point 62 in FIG. 1. For one embodiment, the mixture may be directed into a cooler 70 to reduce the temperature of the mixture, or the mixture may be directed into a container 72 to convert the pre-gel mixture into a crosslinked branched polyester gel without interfacing with the cooler 70. Alternatively, for another embodiment, after "A" and "B" are mechanically or statically mixed, the resulting mixture may be further processed in an extruder or continuous processor 80 to form a crosslinked branched polyester gel. The crosslinked branched polyester gel from 80 may optionally be processed in a cooling apparatus or an additional extruder 90 to lower the temperature of the crosslinked polyester gel. The cooled material from the extruder 90 is directed into a container 92 and packaged using techniques known in the art.

Current US Original Classification (1): 426/3

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L50: Entry 4 of 32 File: USPT Oct 22, 2002

DOCUMENT-IDENTIFIER: US 6469129 B1

TITLE: Process for crosslinked branched polyesters

# Detailed Description Text (28):

In yet another embodiment, the process comprises processing the crosslinked branched polyester gel in a cooling apparatus or an additional extruder to lower the temperature of the crosslinked gel. The temperature is preferably lowered to from about 25 to about 150.degree. C., more preferably from about 25 to about 100.degree. C., and most preferably from about 25 to about 60.degree. C. The crosslinked polyester gel from this embodiment may be directed to a container.

### Detailed Description Text (54):

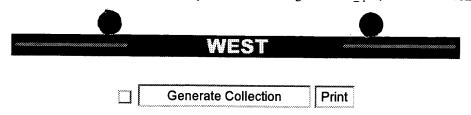
After exiting the optional degasser 60, the pre-gel materials "A" and "B" are mechanically or statically mixed to provide a mixture, which is schematically indicated by merging at a mixing point 62 in FIG. 1. For one embodiment, the mixture may be directed into a cooler 70 to reduce the temperature of the mixture, or the mixture may be directed into a container 72 to convert the pre-gel mixture into a crosslinked branched polyester gel without interfacing with the cooler 70. Alternatively, for another embodiment, after "A" and "B" are mechanically or statically mixed, the resulting mixture may be further processed in an extruder or continuous processor 80 to form a crosslinked branched polyester gel. The crosslinked branched polyester gel from 80 may optionally be processed in a cooling apparatus or an additional extruder 90 to lower the temperature of the crosslinked polyester gel. The cooled material from the extruder 90 is directed into a container 92 and packaged using techniques known in the art.

# $\frac{\text{Current US Cross Reference Classification}}{426/3} \ (1):$

### CLAIMS:

17. The process of claim 16, further comprising introducing the mixture into a cooling apparatus or introducing the mixture into an additional extruder thereby lowering the temperature of the crosslinked branched polyester gel.

1 of 1



L50: Entry 5 of 32 File: USPT Nov 27, 2001

DOCUMENT-IDENTIFIER: US 6322841 B1 TITLE: Cheese-like dairy gels

# Abstract Text (1):

The present invention relates to a cheese-like dairy gel that includes a gum, a starch, and a dairy liquid, wherein the gel has the texture, consistency, and mouthfeel of a cheese. In particular embodiments of the dairy gel, it is essentially fat-free, and is chosen from among cottage cheese, ricotta, cream cheese, American cheese, processed cheese, Parmesan cheese, baker's cheese, cheddar, and Feta cheese. The gum may be an ionically neutral gum, such as konjac, or a microbial gum, gellan gum, or it may be an anionic gum, such as a carrageenan, Kappa-carrageenan, furcelleran, agar, alginate, and the like, or mixtures thereof. The starch, in certain embodiments of the invention, may be potato starch, tapioca starch, corn starch, rice starch, wheat starch, and the like, or mixtures thereof. The invention additionally provides a process for preparing a cheese-like dairy gel wherein the ingredients are blended, briefly heated, packaged, and cooled, or it may be cooled and extruded, sliced, diced, or shredded, then packaged. The invention avoids renneting, fermenting, or acidification that yields curds and whey liquid. It thus provides a simplified process and product which utilizes all the ingredients of the dairy liquid employed.

<u>Current US Original Classification</u> (1): 426/582

Current US Cross Reference Classification (1):

<u>Current US Cross Reference Classification</u> (2): 426/578